

AMENDMENTS TO THE CLAIMS

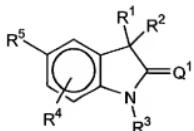
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

2(Previously Presented). The method according to claim 4, wherein said compound of formula I and said selective estrogen receptor modulator are delivered in a single composition.

3(Previously Presented). The method according to claim 4, wherein said compound of formula I and said selective estrogen receptor modulator are delivered separately.

4(Currently Amended). A method of inducing contraception comprising delivering to a female of child-bearing age a composition comprising a compound of formula I in a regimen which involves delivering a pharmaceutically effective amount of one or more selective estrogen receptor modulator selected from the group consisting of EM-800, EM-652, raloxifene hydrochloride, arzoxifene, lasoxifene, droloxifene, tamoxifen citrate, 4-hydroxytamoxifen citrate, clomiphene citrate, toremifene citrate, pipendoxifene, idoxifene, levormeloxifene, centchroman, nafoxidene, and bazedoxifene to said female, wherein formula I is:



I

wherein:

~~R¹ and R² are joined to form a ring selected from the group consisting of~~

$-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$, $-\text{CH}_2\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{CH}_2-$, $-\text{O}(\text{CH}_2)_m\text{CH}_2-$, $-\text{O}(\text{CH}_2)_p\text{O}-$,
 $-\text{CH}_2\text{CH}_2\text{OCH}_2\text{CH}_2-$, $-\text{CH}_2\text{CH}_2\text{N}(\text{H})\text{CH}_2\text{CH}_2-$, and $-\text{CH}_2\text{CH}_2\text{N}(\text{alkyl})\text{CH}_2\text{CH}_2-$;
 m is an integer from 1 to 4;
 n is an integer from 1 to 5;
 p is an integer from 1 to 4;
 or R^1 and R^2 form a double bond to $\text{C}(\text{CH}_3)_2$, $\text{C}(\text{cycloalkyl})$, O , or $\text{C}(\text{cycloether})$;
 R^3 is selected from the group consisting of H , OH , NH_2 , C_1 to C_6 alkyl,
 substituted C_1 to C_6 alkyl, C_3 to C_6 alkenyl, substituted C_3 to C_6 alkenyl, alkynyl,
 substituted alkynyl, and COR^4 ;
 R^4 is selected from the group consisting of H , C_1 to C_3 alkyl, substituted C_1 to C_3
 alkyl, C_1 to C_3 alkoxy, substituted C_1 to C_3 alkoxy, C_1 to C_3 aminoalkyl, and substituted
 C_1 to C_3 aminoalkyl;
 R^4 is selected from the group consisting of H , halogen, CN , NH_2 , C_1 to C_6 alkyl,
 substituted C_1 to C_6 alkyl, C_1 to C_6 alkoxy, substituted C_1 to C_6 alkoxy, C_1 to C_6
 aminoalkyl, and substituted C_1 to C_6 aminoalkyl;
 R^5 is a five membered heterocyclic ring having 1, 2, or 3 heteroatoms selected
 from the group consisting of O , S , SO_2 and NR^6 and having one or two independent
 substituents from the group consisting of H , halogen, CN , NO_2 , C_1 to C_3 alkyl,
 substituted C_1 to C_4 alkyl, C_1 to C_3 alkoxy, substituted C_1 to C_3 alkoxy, C_1 to C_3
 aminoalkyl, substituted C_1 to C_3 aminoalkyl, COR^4 , and CSR^4 , and NR^5COR^4 ;
 R^D is H , NH_2 , C_1 to C_3 alkyl, substituted C_1 to C_3 alkyl, aryl, substituted
 aryl, C_1 to C_3 alkoxy, substituted C_1 to C_3 alkoxy, C_1 to C_3 aminoalkyl, or substituted C_1
 to C_3 aminoalkyl;
 R^E is H , C_1 to C_3 alkyl, or substituted C_1 to C_3 alkyl;
 R^6 is H , or C_1 to C_3 alkyl, substituted C_1 to C_3 alkyl, or C_1 to C_4CO_2 alkyl;
 Q^1 is S ;
 or a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

5(Previously Presented). The method according to claim 4, wherein said compound is delivered at a daily dosage of about 0.1 to about 50 mg.

6(Previously Presented). The method according to claim 4, wherein said regimen comprises delivering said composition daily for 1 to about 21 days, wherein said regimen is a cycle which is repeated monthly.

7(Previously Presented). The method according to claim 4, wherein said selective estrogen receptor modulator is delivered at a daily dosage of about 0.2 to about 100 mg.

8(Canceled).

9(Previously Presented). The method according to Claim 4, wherein R^1 and R^2 are joined to form the $-\text{CH}_2(\text{CH}_2)_n\text{CH}_2-$ ring; n is 3; R^3 and R^4 are H; R^5 is the five membered ring having the structure:



U is O, S, or NR^6 ;

X' is selected from the group consisting of halogen, CN, NO_2 , CONH_2 , and CSNH_2 , COR^B , CSR^B , C_1 to C_3 alkyl, and C_1 to C_3 alkoxy;

R^B is C_1 to C_3 aminoalkyl or substituted C_1 to C_3 aminoalkyl, wherein said aminoalkyl is $NH(\text{alkyl})$ or $N(\text{alkyl})_2$;

Y' is selected from the group consisting of H, halogen, and C_1 to C_4 alkyl, wherein said halogen is F.

10-11(Canceled).

12-13(Canceled).

14(Currently Amended). The method according to claim 4, wherein said compound is selected from the group consisting of 4-(1',2'-Dihydro-2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-2-thiophenecarbonitrile, 4-Methyl-5-(1,2-dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-thiophenethioamide, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5'-yl)-1H-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-(tert-butoxy carbonyl) pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-1-H-pyrrole-2-carbonitrile, 5-(2'-thioxospiro[cyclohexane-1,3'-[3H]indol]-5'-yl)-1-methyl-pyrrole-2-carbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-3-thiophenecarbonitrile, 5-(1,2-Dihydro-thioxospiro[cyclopentane-1,3-[3H]indol]-5-yl)-2-thiophenecarbonitrile, 4-(3,3-dimethyl-2-thioxo-2,3-dihydro-1H-indol-5-yl)-2-furanonitrile, 5-(5-Chloro-2-thienyl)spiro[cyclohexane-1,3-[3H]indol]-2(1H)-thione, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-3-furancarbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-propyl-2-thiophenecarbonitrile, 4-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-2-furancarbonitrile, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"- [3H]indol]-5"-yl)-4-methyl-2-thiophenecarbonitrile, 5-(1",2"-Dihydro-2"-thioxospiro[cyclohexane-1,3"- [3H]indol]-5"-yl)-2-thiophenecarbonitrile, 5-(1,2-Dihydro-2-thioxospiro[cyclohexane-1,3-[3H]indol]-5-yl)-4-n-butyl-2-thiophenecarbonitrile, and a pharmaceutically acceptable salt, tautomer, metabolite, or prodrug thereof.

15-43(Canceled).